GLOBAL
SURGICAL CORPORATION

Memo

To: FIELD TECHNICIANS

From: STEVE VERDERBER

CC:

Date: 1/1/00

Re: GLOBAL SUPPORT OF THE STORZ MAXI CABINETS MODEL 30000 & 40000 SERIES

GLOBAL SURGICAL CORP WILL NO LONGER SUPPORT THE MAXI® CABINETS MODEL 30000, 31000, 40000 AND 41000 SERIES MANUFACTURED BY STORZ INSTRUMENT COMPANY.

A LIST OF PARTS STILL AVAILABLE ARE AS FOLLOWS:

VACUUM PUMP ASSEMBLY, P/N 102005388

PRESSURE PUMP ASSEMBLY, P/N 102009017

INLINE FILTERS, P/N S 850020

COLLECTION CANISTERS, S 600006

VACUUM TUBING, P/N S 400446

SILK HOSE ASSEMBLY, P/N 740288

OTOSCOPE CORD, P/N 014003032.

PLEASE NOTE, OTOSCOPE HANDLE ASSEMPLIES CAN STILL BE SENT TO GLOBAL TO BE REPAIRED

IF YOU HAVE ANY FUTHER QUESTIONS, PLEASE CONTACT GLOBAL SURGICAL TECHNICAL SUPPORT AT 800 861 3610

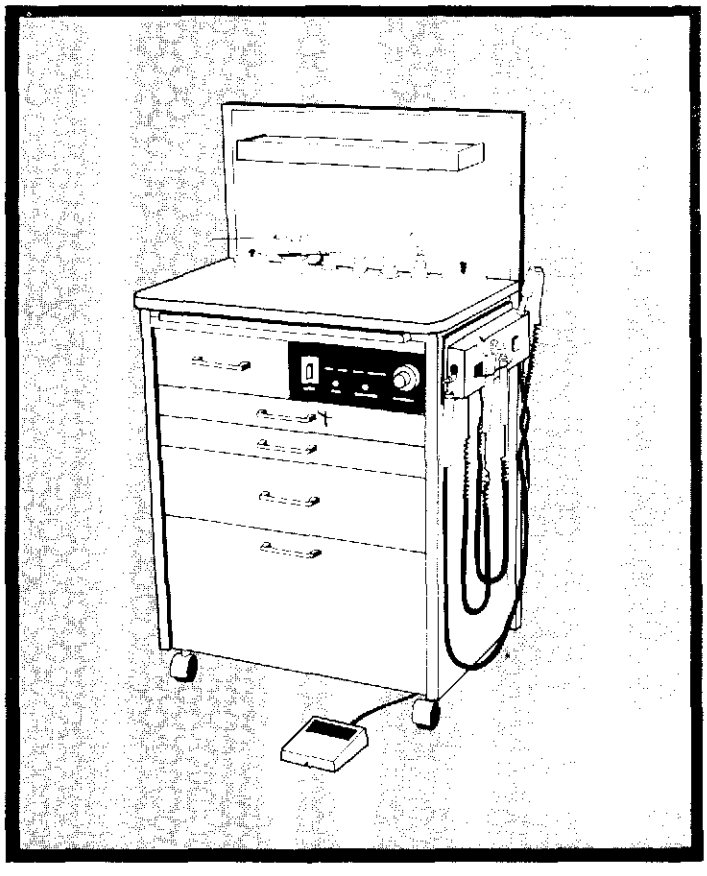
OWNER'S MANUAL

storz® / SMR®

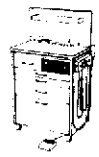
MAXI CABINETS

30000

SMR
30000



5



OPERATION AND CONTROLS

5.1. PUMP CONTROLS.

5.1.1. Both the vacuum pump and the pressure pump are controlled by the same switches. The main circuit breaker (marked POWER) on the front control panel **(see figure 4),** must be in the ON position (it will illuminate) to apply power to either pump.

NOTE: IT IS RECOMMENDED THAT ONLY ONE PUMP BE ON AT A TIME.

5.1.2. VACUUM PUMP CONTROLS. The vacuum pump or solenoid is energized by either:

A. Placing the PUMP switch on the control panel **(see figure 4)** to the left (VACUUM) position;

B. Depressing the left (−) side of the footswitch.

5.1.2.1. When the vacuum pump or solenoid is energized, the red LED marked VACUUM **(see figure 4)** will illuminate. The vacuum hose is located on the left side of the cabinet and secured on a clip.

5.1.3. PRESSURE PUMP CONTROLS. The pressure pump or solenoid is energized by either:

A. Placing the PUMP switch on the control panel **(see figure 4)** to the right (PRESSURE) position.

B. Depressing the right (+) side of the footswitch.

5.1.3.1. When the pressure pump or solenoid is energized, the red LED marked PRESSURE **(see figure 4)** will illuminate. The pressure hose whch terminates in an open-air cut-off handle is located on the right side of the cabinet and hooks on the instrument console.

5.1.4. PRESSURE ADJUSTMENT. The air pressure system must be set to a pressure which suits the owner's application. This pressure is usually about 10 psig (0.7 bar). Once set, the pressure regulator should require no further attention. To adjust the pressure, proceed as follows:

A. Turn on the pressure pump or solenoid and open the bottom door.

B. Pull out on the red-colored locking ring **(see figure 5)** to unlock the pressure-adjust knob.

C. Squeeze the open-air cut-off tip between the thumb and forefinger to restrict the air flow.

D. Turn the pressure-adjust knob either clockwise to increase pressure or counterclockwise to decrease pressure.

E. Release the pressure exerted by your fingers, allow a moment for the pressure to stabilize, then note the pressure dial indication. The pulsation dampener will hold the pressure stable for a short period of time even with both sides of the tip fully open.

F. When the pressure has been adjusted to the desired level, push the red-colored locking ring back to lock the pressure-adjust knob in position.

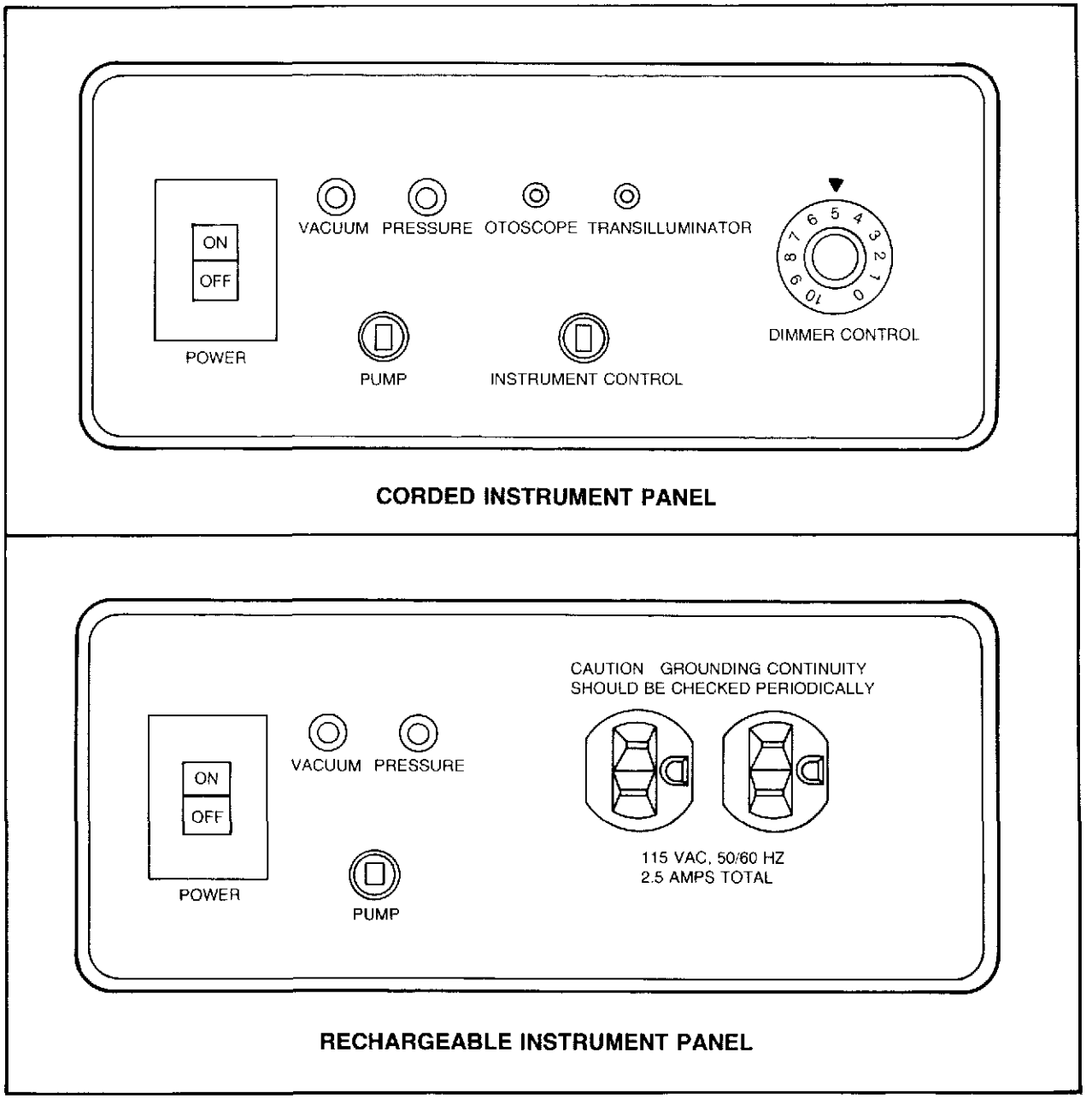


FIGURE 4. CONTROL PANELS

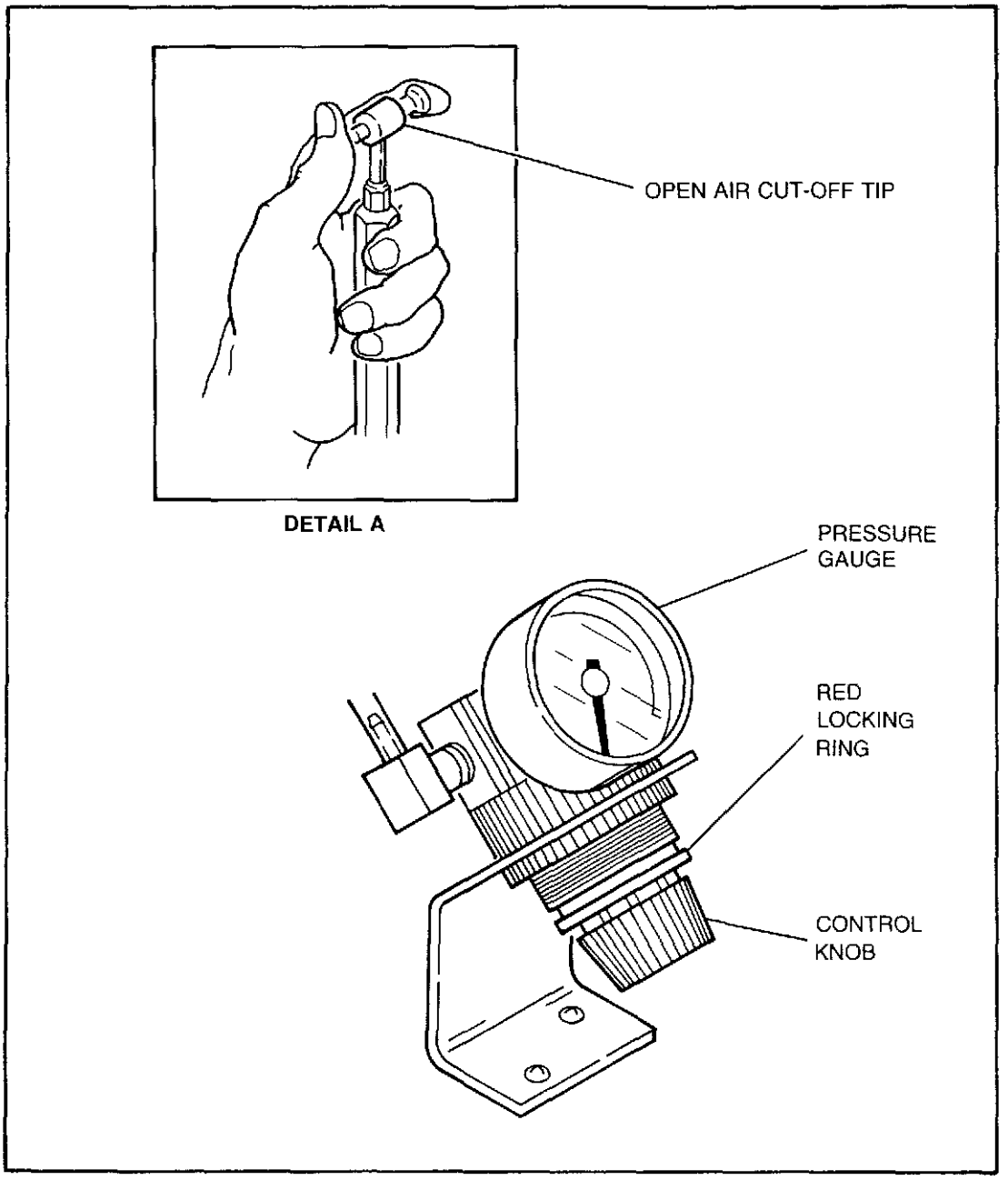


FIGURE 5. PRESSURE ADJUSTMENT

5.2. *ILLUMINATION CONTROLS.*

5.2.1. The major difference between powered cabinet styles is the source of power to the instruments. The controls for the corded and rechargeable instruments are described separately in the following paragraphs.

5.2.2. RECHARGEABLE INSTRUMENTS. The two rechargeable handles are located in the recharge wells on the right side of the cabinet. The handles will accept either the otoscope head or the transilluminator head. An intensity control is located on top of the handle **(see figure 6).**

5.2.2.1. To turn on an instrument and adjust the intensity, depress the red button and turn the black ring clockwise until the desired brightness is obtained. When turning the instrument off, turn the black ring counterclockwise until the red button pops up (lock position).

5.2.2.2. To install an instrument head on the handle, align the notch in the instrument base with the tap on the handle top and press firmly while applying a clockwise twisting force to the handle. Removal is just opposite.

5.2.2.3. To recharge the handle:

A. Turn off the switch on top of the handle.

B. Place the handle into the recharging well.

C. Turn the POWER switch (on the front control panel) to ON. The red LED next to the

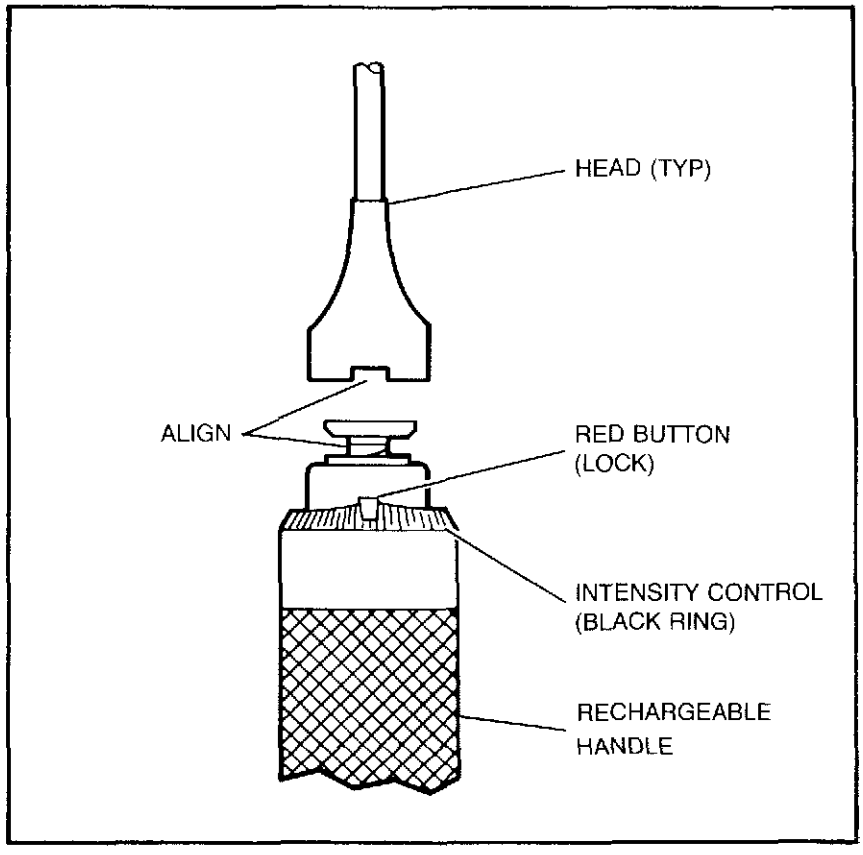


FIGURE 6. RECHARGEABLE INSTRUMENT HANDLE

recharging well will illuminate while the battery is charging. When the LED is not illuminated, the battery is fully charged. The associated charging circuitry prevents overcharging of the batteries.

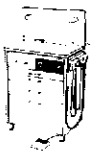
5.2.3. CORDED INSTRUMENTS. Power is applied to either the otoscopes or to the transilluminator power supplies when the main circuit breaker (marked POWER) on the main control panel **(see figure 4)** is in the ON position, and the switch marked INSTRUMENT CONTROL is placed in either the left (OTOSCOPE) or the right (TRANSILLUMINATOR) position.

5.2.3.1. When the INSTRUMENT CONTROL switch is placed in its left position, the red LED marked OTOSCOPE will illuminate. When one of the otoscopes is lifted off its hook, a switch will close to turn on the otoscope. The hook switches for the two otoscopes are wired so that only one scope may be on at a time.

5.2.3.2. When the INSTRUMENT CONTROL switch is placed on its right position, both the red LED marked TRANSILLUMINATOR and the transilluminator will illuminate.

5.2.3.3. The rheostat knob marked DIMMER CONTROL on figure 4 is used to control the intensity of light from the transilluminator or otoscope. The numbers on the knob are for positional reference only and do not depict any measurement of power or photometric intensity. The user may wish to use the marks to obtain some predetermined levels of intensity during certain uses. Turn the knob counterclockwise to decrease the light intensity, and turn the knob clockwise to increase the light intensity. To prolong the life of the transilluminator bulb, use it at the lowest setting possible for its application.

6



MAINTENANCE AND REPAIR

6.1. CLEANING.

6.1.1. The working surface and slide-out writing shelf and the wood-grain cabinets can be cleaned with any non-abrasive cleaner recommended for formica surfaces. The stainless steel surfaces can be cleaned with any commercial stainless steel cleaner/polish.

6.2. CHANGING FILTER.

6.2.1. The hydrophobic filter should be changed after four weeks or whenever filter operation is impaired.

CAUTION: Extended use of alcohols or solvents may reduce the hydrophobic properties of the microporous membrane.

6.2.2. Change the filter by simply removing the filter from the tubing between the disposable cannister and the vacuum pump. Insert a new filter into the tube **(see figure 7).**

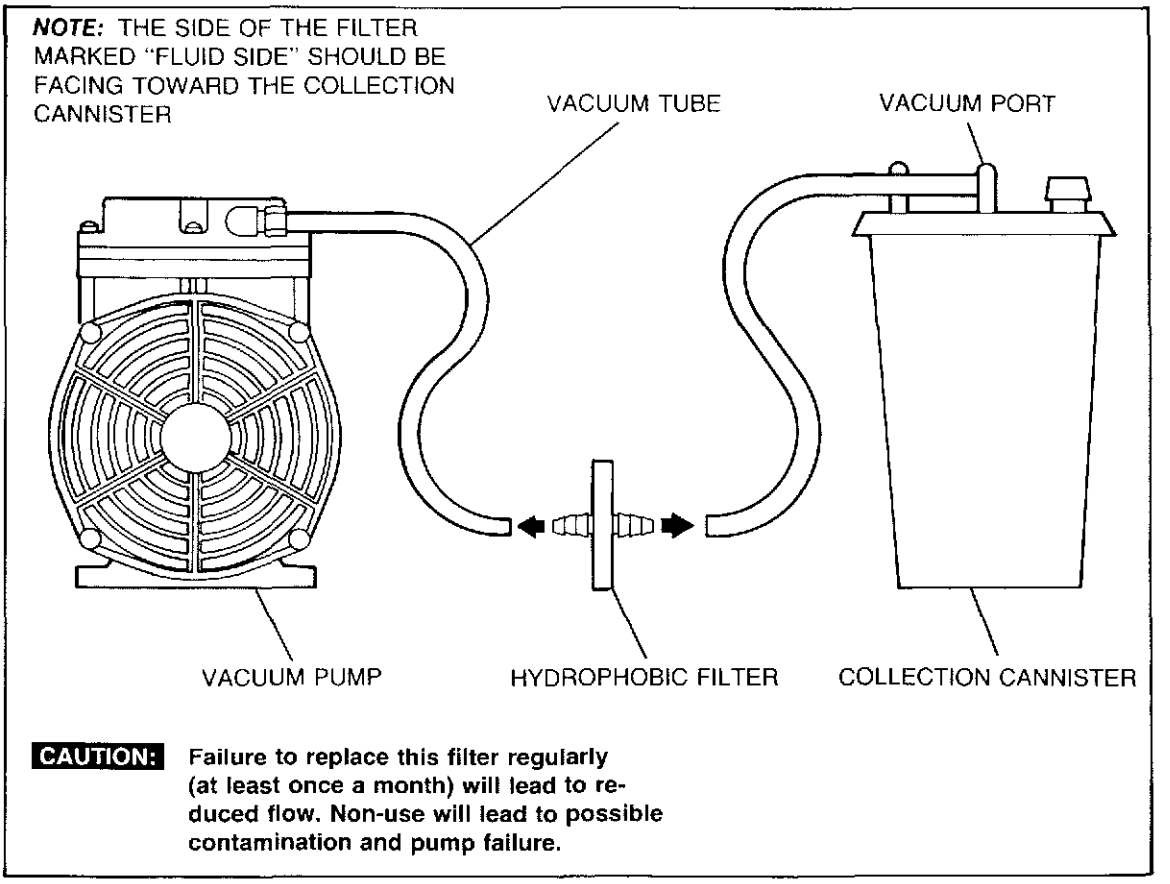

NOTE: THE SIDE OF THE FILTER MARKED "FLUID SIDE" SHOULD BE FACING TOWARD THE COLLECTION CANNISTER
VACUUM TUBE
VACUUM PORT
VACUUM PUMP
HYDROPHOBIC FILTER
COLLECTION CANNISTER
CAUTION: Failure to replace this filter regularly (at least once a month) will lead to reduced flow. Non-use will lead to possible contamination and pump failure.

FIGURE 7. CHANGING HYDROPHOBIC FILTER

6.3. REMOVING DRAWERS.

6.3.1. If it becomes necessary to remove any drawer for cleaning or other reasons, proceed as follows:

A. Pull drawer to its full extension and give it an extra tug. This locks the bottom and middle slides together, thus preventing the middle slide from falling out. It also makes drawer reinstallation easier.

B. Lift the front of the drawer upward so that the front roller on the middle slide passes through the slot in the upper slide.

C. Pull the drawer forward to clear the rear roller on the middle slide.

D. Reinstall the drawer in reverse order.

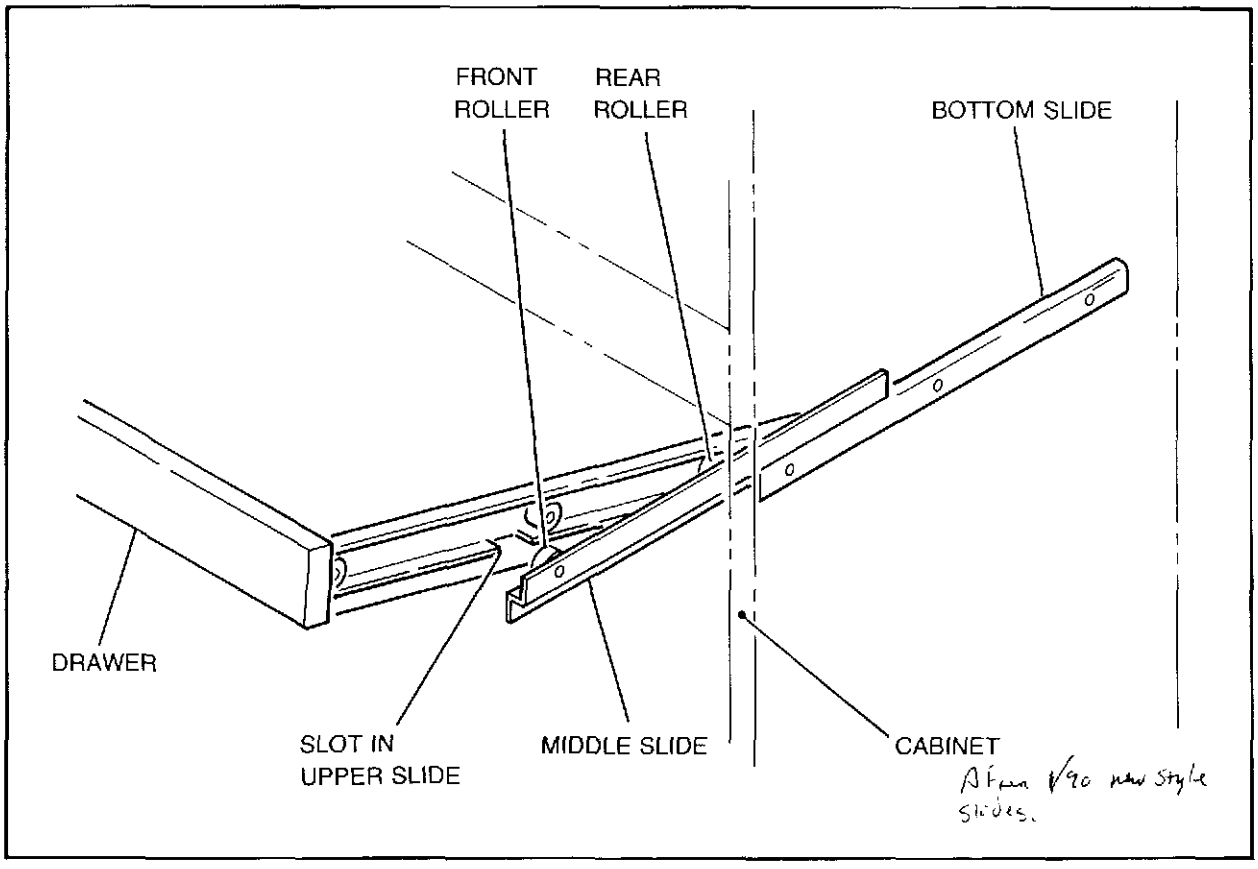


FIGURE 8. REMOVING DRAWER

6.3.2. If the middle slide should come off the lower slide, proceed as follows:

A. Hold the middle slide so that the slide is at an angle to the bottom slide and the front edges of the two slides are even.

B. Rotate the middle slide into the glide on the bottom slide, bringing it to the vertical position.

C. Pull the middle slide to its fully extended position, giving it an extra tug to snap it into the lock, thus preventing the slide from coming off again.

6.4. IN CASE OF TROUBLE.

6.4.1. With proper use and care, there is very little that will fail on the maxi-cabinet or its hardware. In the event that a mechanical component does fail, it is recommended that you contact your Storz representative or call the Storz Customer Service Department at 800-325-9500 or 314-225-5051. If it becomes necessary to return the unit to the Storz factory, refer to the instructions in section II.

6.5. SERVICE TECHNICIAN DATA.

WARNING: Disconnect power before servicing.

6.5.1. Included at the rear of this manual are drawings **(figures 9 through 17)** for troubleshooting and repair of the items located inside the cabinet. Use these drawings to isolate a problem to a replaceable unit. This data is intended for use by qualified service personnel only.

6.5.2. When a defective unit has been located, refer to **figures 11 through 14** at the rear of this manual for removal, reinstallation, and parts lists.

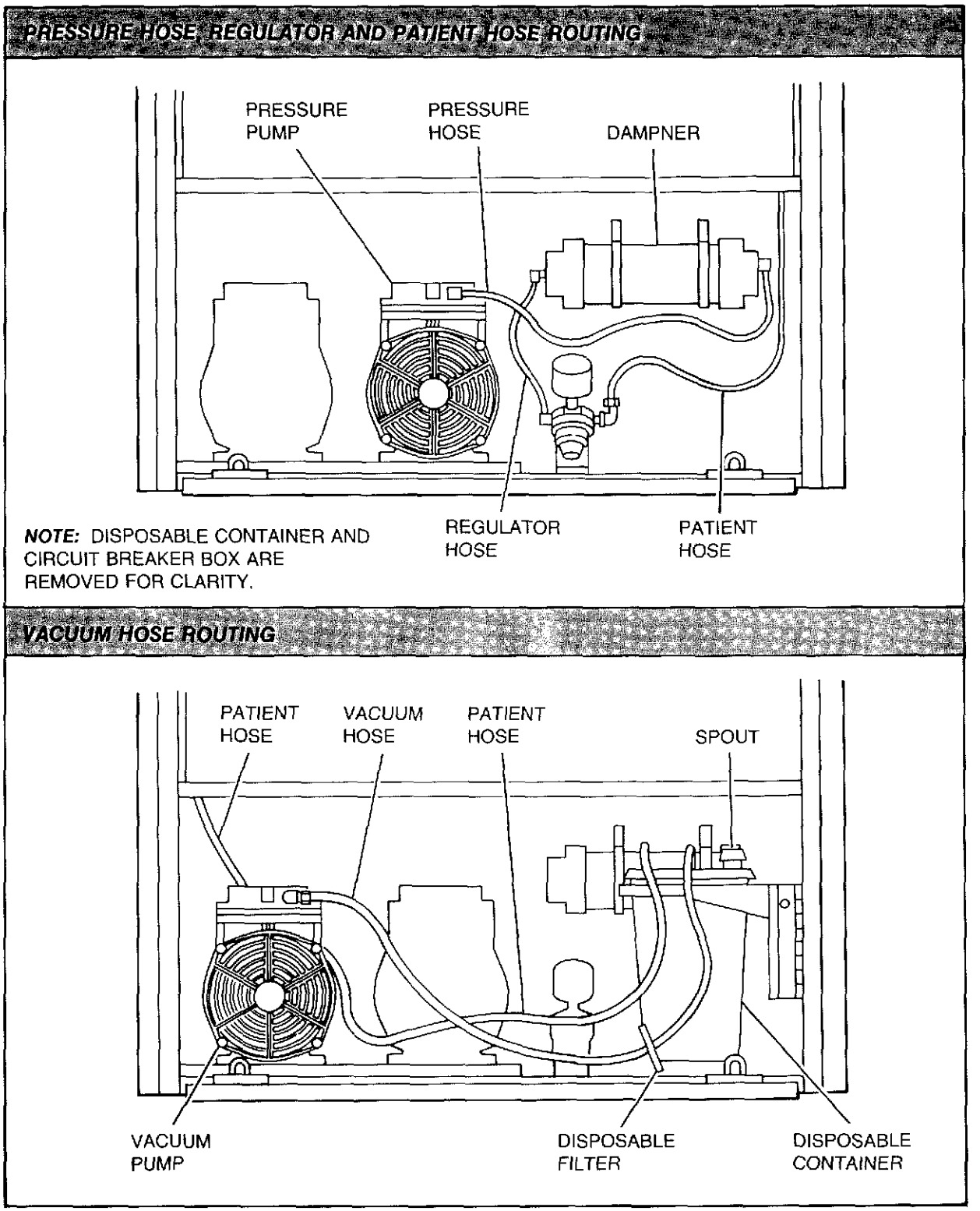


FIGURE 9. LOWER CABINET HOSE ROUTING

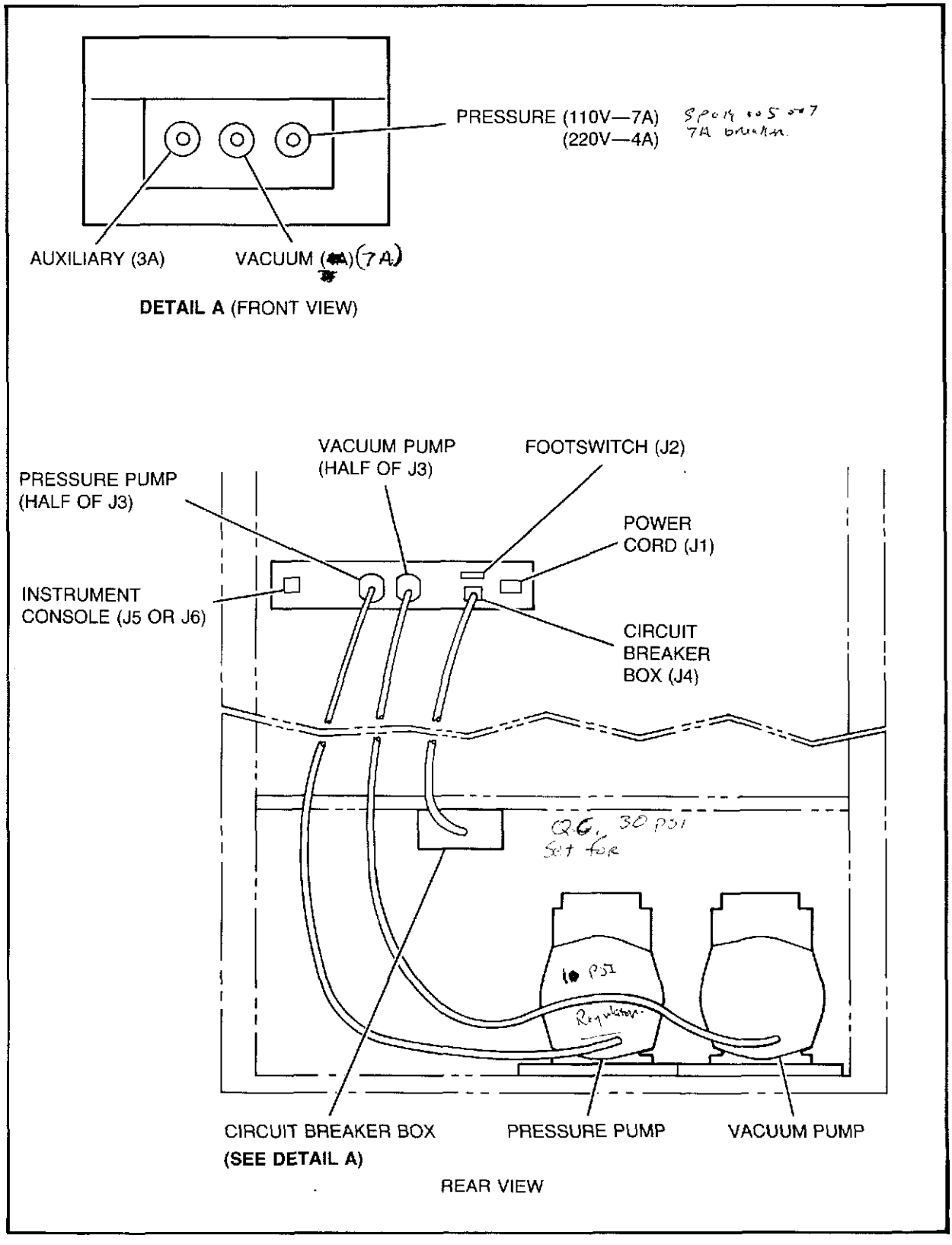


FIGURE 10. LOCATION OF ELECTRICAL COMPONENTS AND CONNECTIONS

TABLE OF CONTENTS

Paragraph		Page
Section 1: General Information		
1.1.	Introduction	1
Section 2: Service and Warranty Information		
2.1.	Warranty Information	4
2.2.	Service Information	4
Section 3: Unpacking and Preparation for Use		
3.1.	Contents	5
3.2.	Unpacking	5
3.3.	Caster Installation	6
3.4.	Treatment Cabinet Preparations	6
3.4.1.	Cabinets With Pumps	6
3.4.2.	Central Air Hook Up	6
3.5.	Installing Disposable Container	7
Section 4: Description		
4.1.	Options	9
4.2.	Parameters	9
4.2.1.	Pressure Pump Specifications	10
4.2.2.	Vacuum Pump Specifications	10
4.3.	Solenoid-Operated Cabinet Specifications	10
Section 5: Operation and Controls		
5.1.	Pump Controls	11
5.1.2.	Vacuum Pump Controls	11
5.1.3.	Pressure Pump Controls	11
5.1.4.	Pressure Adjustment	11
5.2.	Illumination Controls	14
5.2.2.	Rechargeable Instruments	14
5.2.3.	Corded Instruments	15
Section 6: Maintenance and Repair		
6.1.	Cleaning	16
6.2.	Changing Filter	16
6.3.	Removing Drawers	17
6.4.	In Case Of Trouble	18
6.5.	Service Technician Data	18

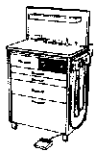
LIST OF TABLES

Table		Page
1	SMR Model Number and Related Characteristics	1
2	Dimensions	10

LIST OF ILLUSTRATIONS

Figure		Page
1	Maxi-Cabinets	2, 3
2	Installation Of Disposable Container	7
3	Corded Instrument Connections	8
4	Control Panels	12
5	Pressure Adjustment	13
6	Rechargeable Instrument Handle	14
7	Changing Hydrophobic Filter	16
8	Removing Drawer	17
9	Lower Cabinet Hose Routing	19
10	Location Of Electrical Components And Connections	20
11	Pump Compartment Parts Breakdown	21
12	Solenoid Compartment Parts Breakdown	22
13	Corded Instrument Parts Breakdown	23
14	Rechargeable Instrument Parts Breakdown	24
15	Main Power Distribution Schematic	25
16	Corded Otoscope And Transilluminator Schematic	26
17	Rechargeable Instrument Handle Schematic	27

1



GENERAL INFORMATION

1.1 INTRODUCTION.

1.1.2. The Maxi-Cabinets serve as integrated treatment centers to keep instruments and equipment within easy reach of the physician. Powered cabinets either contain a pressure pump and vacuum pump or pressure and vacuum solenoids which connect to the hospital air system. Both types have a single disposable container and multiple illumination devices.

1.1.3. This manual is primarily directed toward powered treatment cabinets, but general information concerning installation of casters, removal of drawers, and cleaning apply to all cabinets. Data is included for servicing the components of powered cabinets. It is recommended that servicing and repair be done by qualified service personnel.

1.1.4. The equipment covered by this manual is shown in **figure 1.** All items are characterized as shown by the following table.

TABLE 1. SMR MODEL NUMBER AND RELATED CHARACTERISTICS.

5-DRAWER TREATMENT																				
HIGH PROFILE	●	●	●	●	●										●	●	●	●		●
LOW PROFILE						●	●	●	●	●	●	●	●	●					●	
STAINLESS STEEL	●	●	●	●	●	●	●	●	●	●										
LAMINATED											●	●	●	●	●	●	●	●	●	●
CORDED	●		●			●		●			●		●		●		●			
RECHARGEABLE		●		●			●		●			●		●		●		●		
110-VOLT	●	●				●	●				●	●			●	●				
220-VOLT			●	●				●	●				●	●			●	●		
7-DRAWER STORAGE					●					●									●	●
SMR NUMBER	30000	30001	30020	30021	30040	31000	31001	31020	31021	31040	40000	40001	40020	40021	41000	41001	41020	41021	42000	43000

7-DRAWER TREATMENT								
CORDED	●		●		●		●	
RECHARGEABLE		●		●		●		●
PUMPS	●	●			●	●		
SOLENOIDS			●	●			●	●
HIGH PROFILE	●	●	●	●	●	●	●	●
LAMINATED	●	●	●	●				
STAINLESS STEEL					●	●	●	●
110-VOLT	●	●	●	●	●	●	●	●
SMR NUMBER	44000	44001	45000	45001	46100	46101	47100	47101

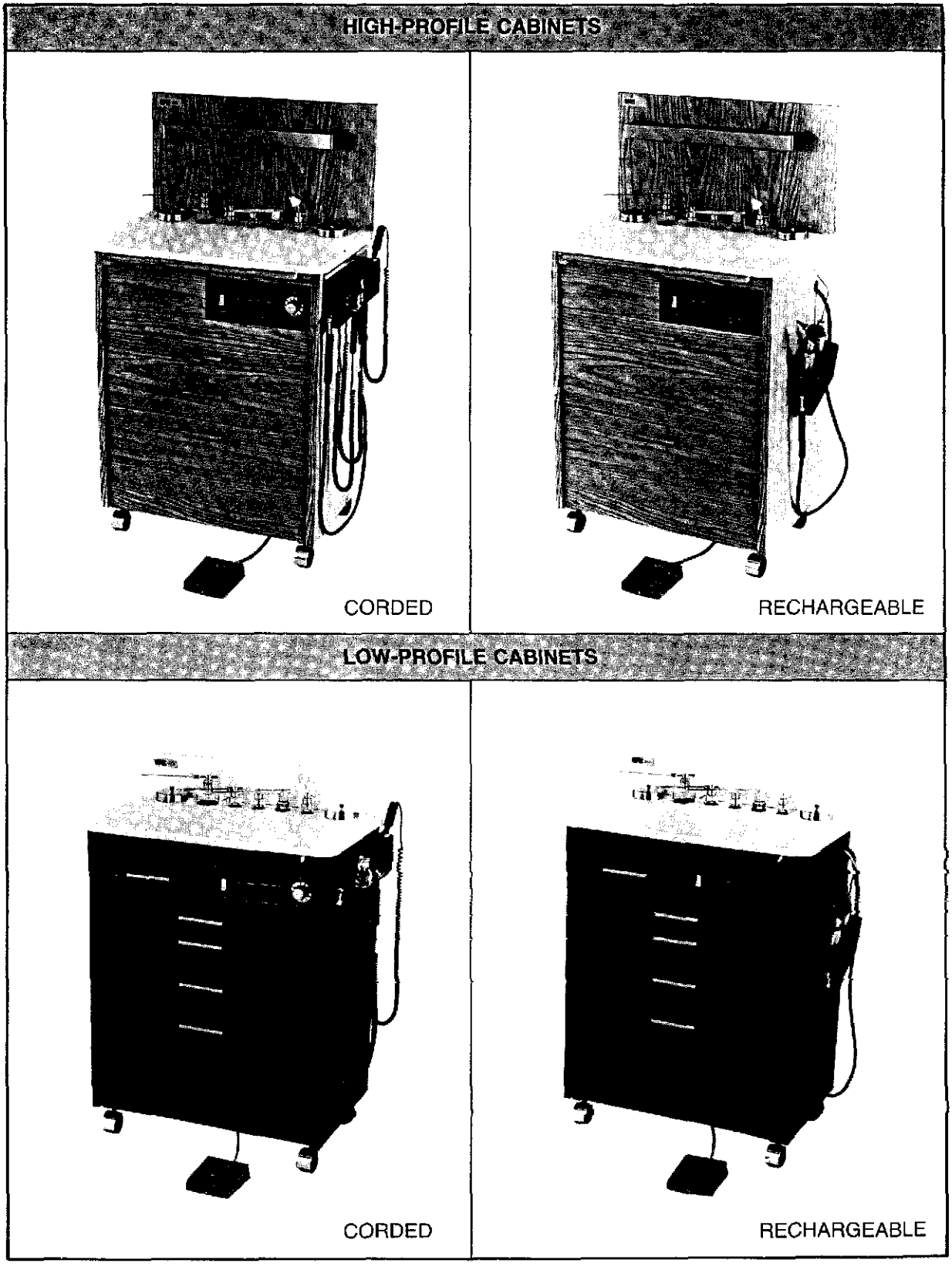


FIGURE 1. MAXI-CABINETS (Sheet 1 of 2)

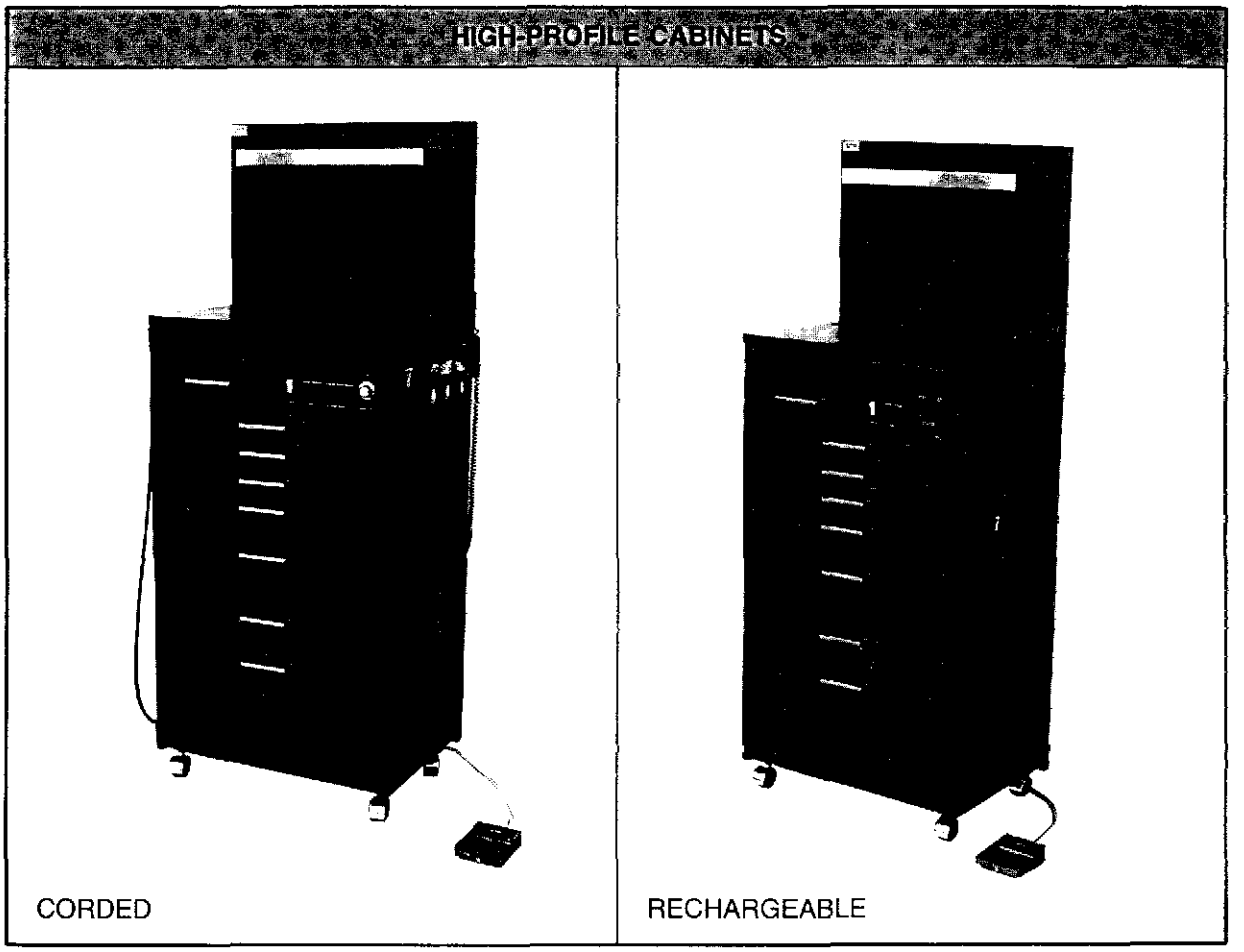
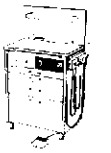


FIGURE 1. MAXI-CABINETS (Sheet 2 of 2)

2



SERVICE AND WARRANTY INFORMATION

2.1. WARRANTY INFORMATION.

2.1.1. Storz warranty information is included with each invoice. Please consult your invoice for specific terms and conditions concerning your warranty.

2.2. SERVICE INFORMATION.

2.2.1 In the event of any malfunction, you should immediately contact the Storz Repair Service Department for assistance (314-225-5051 or 800-325-9500). A return authorization number must be obtained from the Storz Service Department prior to returning any unit for repair. If you return your unit for repair, be sure to include the following:

A. The unit;
B. A letter describing the problem with the owner's name, address and phone number;
C. Proof of date of invoice;
D. The return authorization number.

2.2.2. Return the product, transportation and insurance prepaid, to:

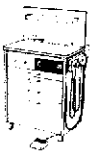
Storz Instrument Company
3365 Tree Court Industrial Blvd.
St. Louis, MO 63122

Attention: Repair Services

2.2.3. If available, use the original packing material to repackage the unit. If the original packing material has been discarded, contact the Storz Customer Service Department to have replacement packing material sent to you.

2.2.4. If you have questions which are not answered in this manual, please contact the Storz Customer Service Department at 800-325-9500.

3



UNPACKING AND PREPARATION FOR USE

NOTE: ALL BOXES AND PACKING MATERIAL SHOULD BE RETAINED. IN THE EVENT YOUR MAXI-CABINET MUST BE RETURNED TO THE FACTORY, THE PACKING MAY BE RE-USED.

3.1. CONTENTS.

3.1.1. The complete maxi-cabinet consists of the following items:

QUANTITY	BASIC PARTS
1	Cabinet Assembly with Drawers.
4	Casters.

3.1.2. The powered cabinets also consist of the following items:

QUANTITY	BASIC PARTS
1	Power Supply Panel.
1	Vacuum Pump or Solenoids with Tubing.
1	Pressure Pump or Solenoids with Tubing.
1	Hydrophobic Filter (Installed).
1	Hydrophobic Filter (Spare).
1 Ctn	Disposable Containers.
1 Set	Otoscope and Transilluminator Instruments.
1 Set	Glassware Instruments.

3.2. UNPACKING.

3.2.1. Each maxi-cabinet is thoroughly inspected and carefully packaged for shipment. Inspect the exterior for shipping damage as soon as possible. If the outer carton appears to be crushed, torn, or otherwise damaged to the extent that the equipment inside is likely to have suffered damage, do not attempt to unpack the cabinet. Contact the carrier immediately. Unpack the unit in the presence of the carrier's claim representative.

3.2.2. Carefully unpack the equipment and perform a visual inspection to determine that no apparent damage has been incurred during shipment. All shipping materials should be retained until it has been determined that the unit was not damaged in shipment. Claims for damaged equipment must be filed promptly.

3.2.3. The contents of the shipment should be as indicated on the packing lists. If the contents are incomplete, or if the unit is damaged electrically or mechanically, notify the Storz Instrument Co. customer service department (1-800-325-9500 or 314-225-5051) at the following address:

Storz Instrument Company
3365 Tree Court Industrial Blvd.
St. Louis County, MO 63122

3.2.4. To remove a carton, proceed as follows:

WARNING: Metal banding straps have a tendency to spring outward as they are cut. Assure safe clearance is allowed when cutting these straps.

A. Cut the banding straps and open the top of the carton.

B. Remove the small boxes which contain the glassware.

C. Remove the cardboard corner protectors.

D. Lift the upper carton up and off the cabinet.

E. Remove the remaining cardboard protection pieces.

F. Lift the cabinet off the base carton.

3.3. CASTER INSTALLATION.

3.3.1. Remove the casters from the accessory carton. Tip the cabinet over on its back. Insert the shaft of each caster into a retaining inset in the bottom of the cabinet and press the casters into place. A rubber mallet may be used if necessary. The casters should snap firmly into the proper position.

3.4. TREATMENT CABINET PREPARATIONS.

3.4.1. CABINETS WITH PUMPS.

CAUTION: There is a hydrophobic filter installed in the vacuum line to prevent pump damage. This filter should be replaced periodically. Refer to section 4.

3.4.1.1. Open the door of the pump compartment. Cut and remove the tape around the two pumps. Connect the line cord to the line socket. Turn on the pressure pump **(see paragraph 5.1.3.)**, and set the air pressure **(see paragraph 5.1.4).** Turn off the pump and close the door.

3.4.2. CENTRAL AIR HOOK UP. Due to the variety of connectors used in various institutions, the user must provide mating connectors which are compatible with his system. Install the air pressure mating connector on the yellow hose on the rear of the cabinet. Then connect the yellow hose to the central air pressure line. Install the vacuum mating connector on the white hose on the rear of the cabinet. Then connect the white hose to the central vacuum line.

3.5. INSTALLING DISPOSABLE CONTAINER.

3.5.1. Remove the disposable container from one of the accessory cartons. Swing the bracket located on the right side of the cabinet forward **(see figure 2).** Locate the two loose hoses marked VACUUM and PATIENT. Connect the hoses to the container matching the markings. Set the container in the bracket and swing the bracket back into the cabinet.

3.5.2. If a corded instrument type cabinet has been purchased, the transilluminator and the two otoscopes were shipped in a separate carton and must be connected. The connectors on these items are keyed for proper orientation. Hold the plug on each item so that the keyway is facing you and insert the plug into the correct receptacle on the side console **(see figure 3).** Connect the line cord to the wall socket.

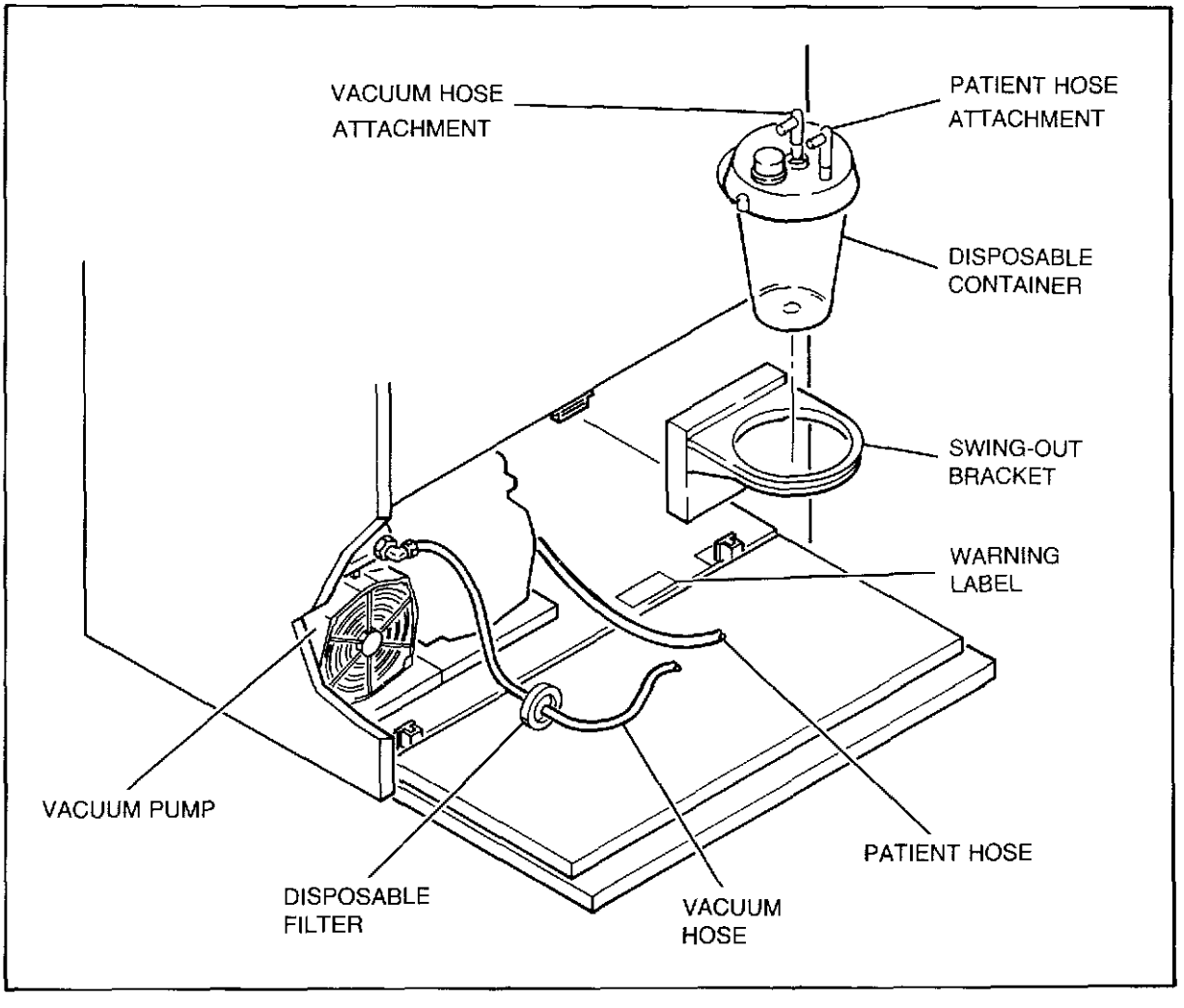


FIGURE 2. INSTALLATION OF DISPOSABLE CONTAINER

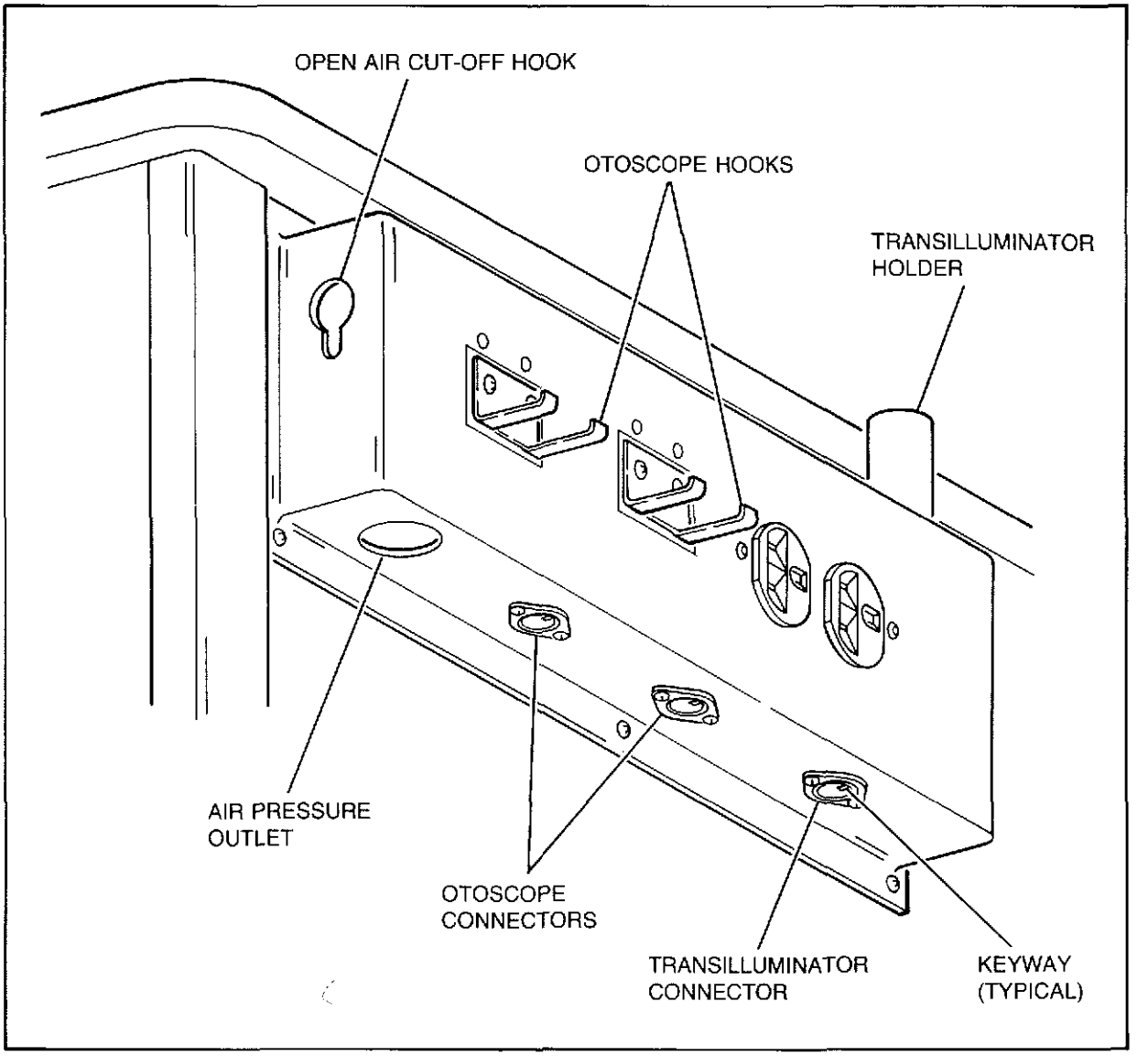


FIGURE 3. CORDED INSTRUMENT CONNECTIONS

4

DESCRIPTION

4.1. OPTIONS.

4.1.1. Each Maxi-Cabinet can have a combination of the following characteristics:

A. Power instruments treatment cabinet or 7-drawer storage cabinet.

B. High profile or low profile back.

C. Stainless steel or laminated wood-grain finish.

D. Powered cabinets may be wired for use with either 110 volt or 220 volt supplies.

E. Powered cabinets may have corded or rechargeable light handles.

F. Powered cabinets may contain pumps to supply pressure and vacuum or contain solenoids and connect to the hospital air system.

4.1.2. The vacuum line on powered instrument cabinets will include a disposable hydrophobic filter, a disposable container, and a regulated air pressure supply with assorted glassware attachments. Both air lines are controlled by either a panel switch or a footswitch. Powered cabinets include an auxiliary hospital grade grounded duplex outlet receptacle for the convenience of connecting additional equipment not included with the cabinet. On the corded instrument cabinet this outlet is located on the side console **(see figure 3).** On the rechargeable instrument cabinet this outlet is located on the front control panel **(see figure 4).** Check the device(s) which you intend to connect to this outlet to be sure the devices do not require more than 2.5 amperes maximum total for operation. All electrical devices should contain this information on their label.

4.2. PARAMETERS.

4.2.1. The dimensions of the various styles of treatment cabinets are shown in **table 2.** Specifications of the vacuum pump and pressure pump are given in the following paragraphs. Electrical specifications for the powered instrument cabinets are shown on schematics at the rear of this manual.

TABLE 2. DIMENSIONS

CHARACTERISTIC	4-DRAWER TREATMENT/ 7-DRAWER STORAGE	7-DRAWER TREATMENT
Height:		
High profile:	44 in. (111.8 cm)	58¾ in. (149.2 cm)
Low profile:	35¼ in. (89.5 cm)	—
Height to work surface:	32 in. (81.3 cm)	41¾ in. (106 cm)
Work surface:	24½ in. (62.2 cm) wide 15½ in. (39.4 cm) high	24¾ in. (62.9 cm) wide 16¼ in. (41.3 cm) high
Overall width (powered cabinets only)	27 in. (68.6 cm)	28 in. (71.1 cm)
Slide-out writing shelf:	19¼ in. (48.9 cm) wide 7¼ in. (18.4 cm) deep	19¼ in. (48.9 cm) wide 7¼ in. (18.4 cm) deep
Shipping weight		
powered:	170 lbs. (7.71 kg)	215 lbs. (97.52 kg)
storage:	65 lbs. (29.48 kg)	—

4.2.1. PRESSURE PUMP SPECIFICATIONS. *The pressure pump is either a 110-volt or* 220-volt, thermal-protected, ⅛-horsepower, piston-type compressor. The compressor will operate either from 50 or 60 Hz lines. The maximum continuous or intermittent pressure developed by the pump is 100 pounds per square inch, however the regulator will permit control of this pressure between 0 and 60 psig. Normally the regulator should be adjusted for 10 psig (0.7 bar) **(see paragraph 5.1.4.).** A dampener stores a small charge of air pressure so that a steady air flow is maintained at the output nozzle. **Figures 9 and 10** provide a schematic diagram of this system and the hose routing.

4.2.2. VACUUM PUMP SPECIFICATIONS. The vacuum pump is either a 110-volt or 220-volt, thermal-protected, ⅛-horsepower, piston-type pump. The pump will operate either from 50 or 60 Hz lines. The pump will draw down to a maximum of 26 inches (66 cm) of mercury. Unrestricted air flow is 1.55 cubic feet (0.044 cubic meters) per minute. A disposable container collects contaminates. **Figures 9 and 10** provide a schematic diagram of this system and the hose routing.

4.3. SOLENOID OPERATED CABINET SPECIFICATIONS.

CAUTION: The air supply must be free of oil and all contaminates.

4.3.1. Vacuum and pressure to these cabinets depends directly upon the supplied sources. Each source is controlled by a two-way normally-closed solenoid valve which is energized by 115 V AC when the pump switch on the control panel is placed in the appropriate position.

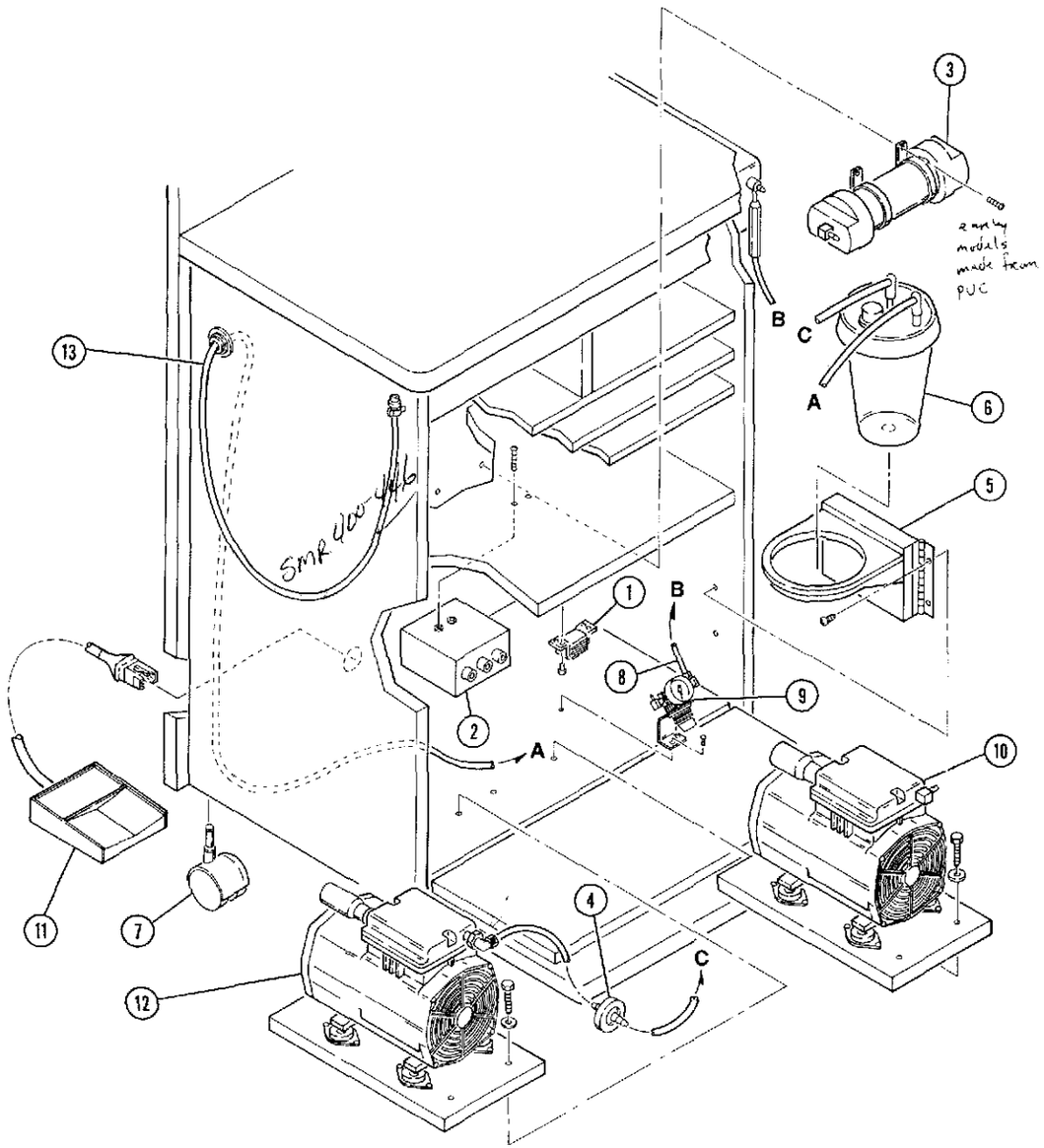


FIGURE 11. PUMP COMPARTMENT PARTS BREAKDOWN

REF. NO.	PART NO.	DESCRIPTION
1	160-245	MAGNETIC CATCH
2	102-010-021	CIRCUIT BREAKER BOX, 110 V
	102-010-009	CIRCUIT BREAKER BOX, 220 V
	160-800	8-32 × 1¼" FLAT HD. PHIL. MACH. SCREW (2)
3	102-005-129	PULSATION DAMPNER
	160-425	8 × ¾ LG. PAN HD. PHIL. SHT. MTL. SCREW (2)
4	SAM-5002	DISPOSABLE HYDROPHOBIC FILTER
5	135-041	DISPOSABLE SUCTION CONTAINER MOUNTING BRACKET
	021-540-168	4 × ⅝ FLAT-PHIL. HD. WOOD SCREW ZINC PLATED (2)
6A	850-017	DISPOSABLE SUCTION CONTAINER 5-PACK
		CONSISTING OF:
	070-016	SUCTION HOSE ASSEMBLY, 10 FT. (1)
	135-041	TRAP JAR BRACKET (1)
	160-425	8 × ¾" PAN HEAD SHEET METAL SCREW (2)
	390-144	BLUE SUCTION CANISTER (5)
	SAM-5002	DISPOSABLE HYDROPHOBIC FILTER (2)
6B	850-018	DISPOSABLE SUCTION CONTAINER 10-PACK
		CONSISTING OF:
	135-041	TRAP JAR BRACKET (1)
	160-425	8 × ¾" PAN HEAD SHEET METAL SCREW (2)
	390-144	BLUE SUCTION CANISTER (10)
	070-016	SUCTION HOSE ASSEMBLY, 10 FT. (1)
	112-003-007	CLEAR POLY BAG (1)
	112-002-089	OYSTER WHITE CANISTER BOX (1)
	SAM-5002	DISPOSABLE HYDROPHOBIC FILTER (3)
7	160-914	CASTERS (4)
8	740-288	PRESSURE HOSE ASSEMBLY
9	102-005-144	AIR REGULATOR/GAUGE ASSEMBLY
	160-413	6 × ⅝ RD. HD. BLK. OXIDE SCREW (2)
10	102-009-017	PRESSURE PUMP ASSEMBLY, 110 V
	102-005-107	PRESSURE PUMP ASSEMBLY, 220 V
	160-204	¼-20, 1½ CAPSCREW (2)
	250-404	5/16 FLAT WASHER (2)
11	013-001-005	PUMP CONTROL FOOTSWITCH
12	102-005-388	VACUUM PUMP ASSEMBLY, 110 V
	102-005-108	VACUUM PUMP ASSEMBLY, 220 V
	160-204	¼-20, 1¼ CAPSCREW (2)
	250-404	5/16 FLAT WASHER (2)
13	070-016	SUCTION HOSE ASSEMBLY, 10 FT.

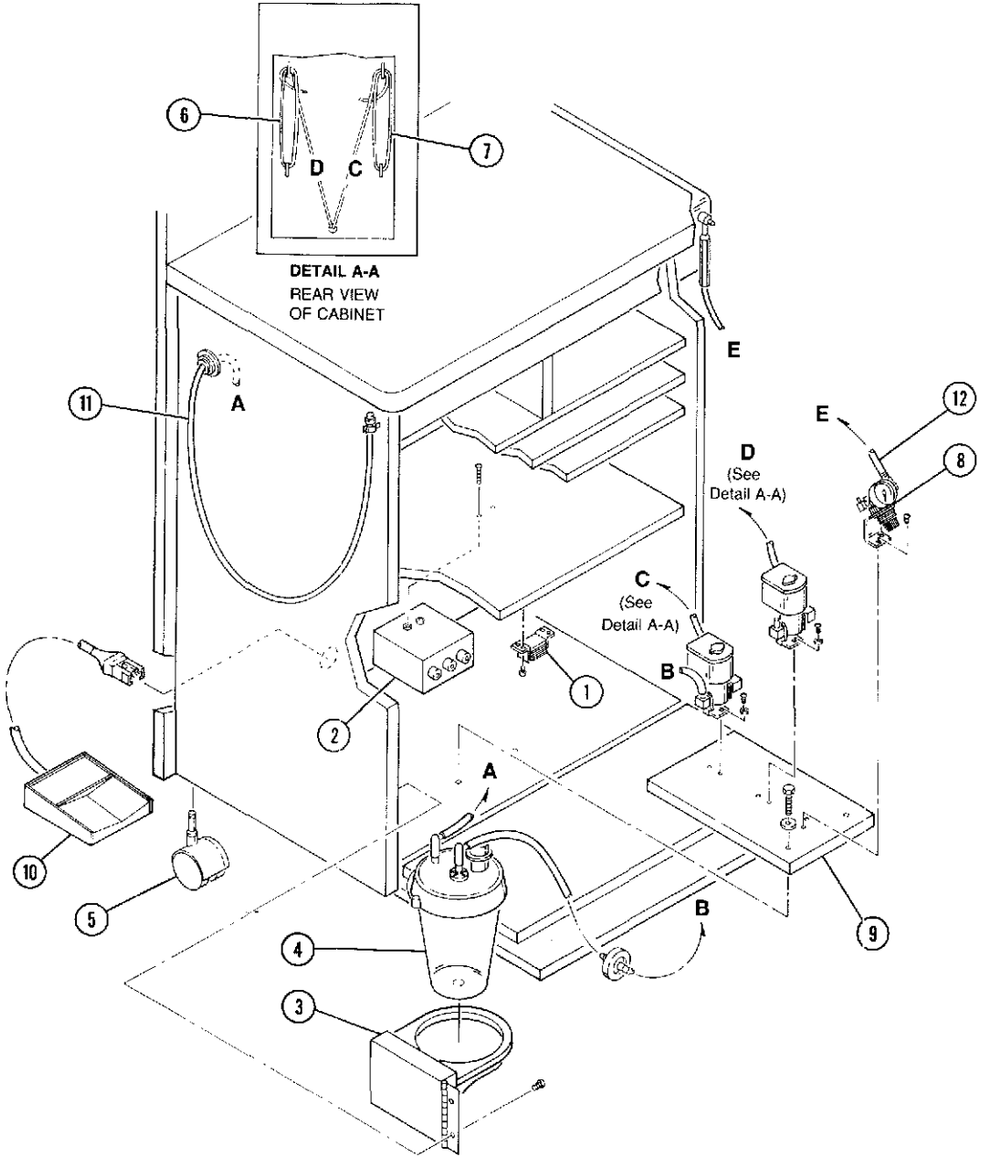
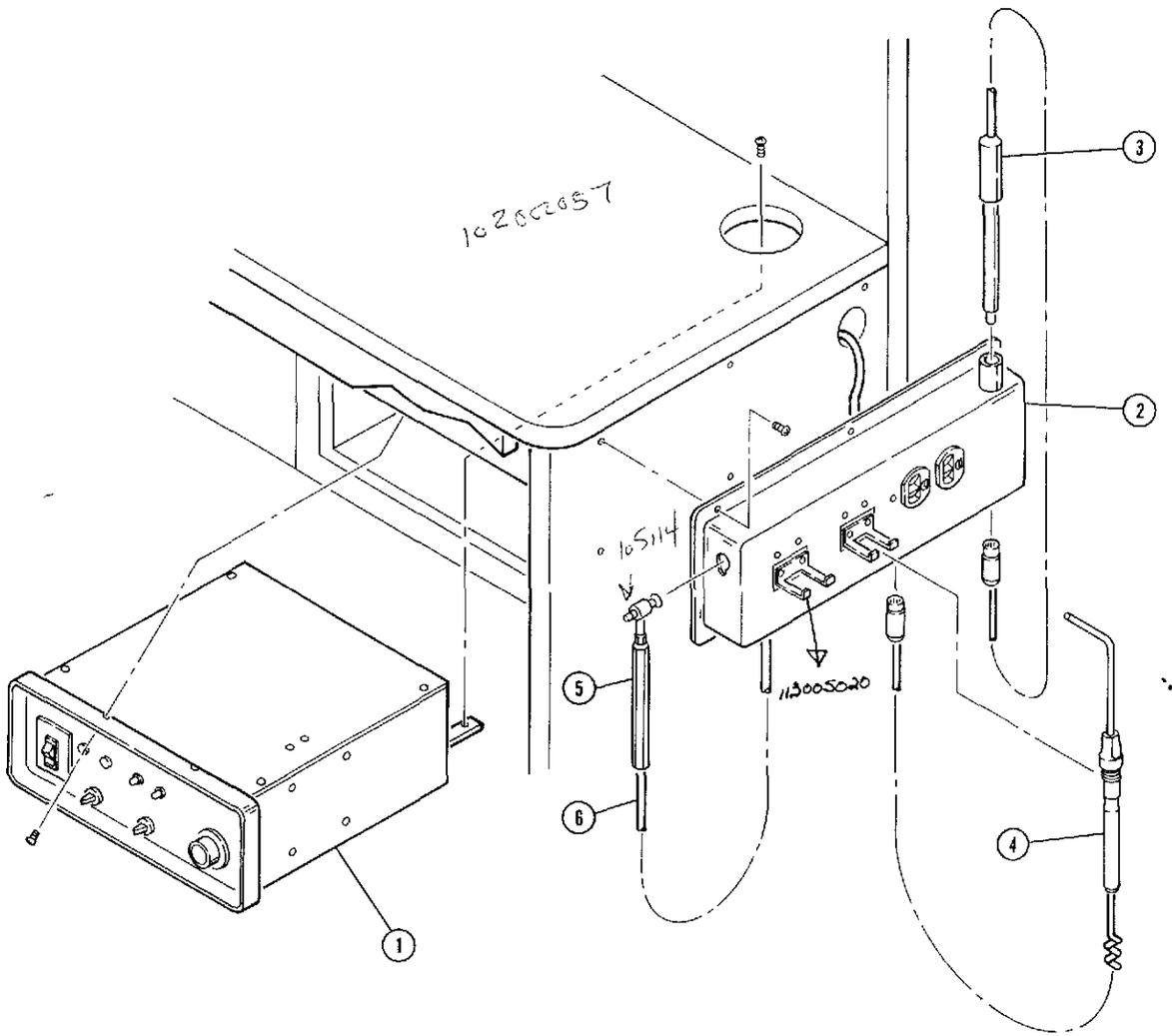


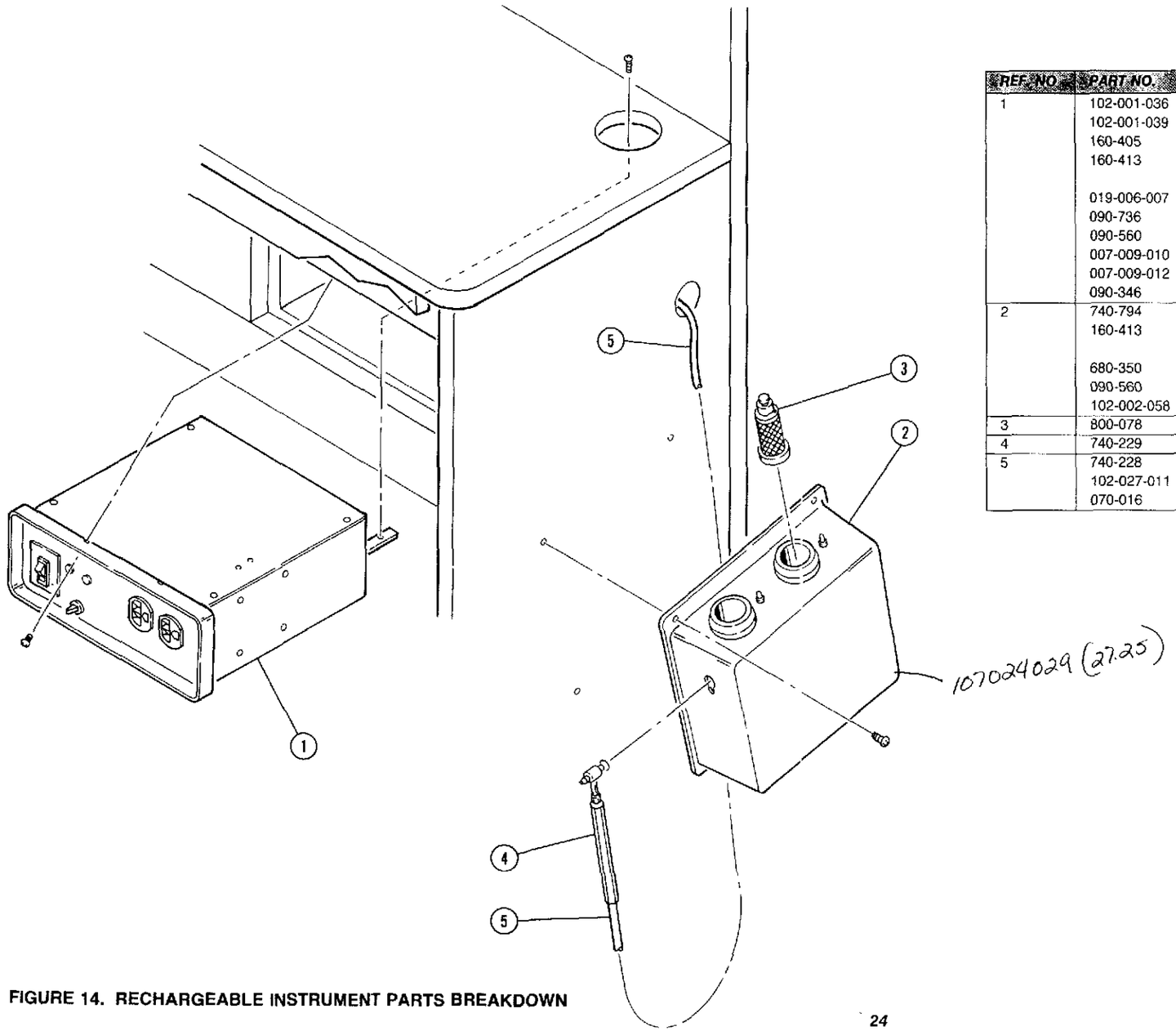
FIGURE 12. SOLENOID COMPARTMENT PARTS BREAKDOWN

REF NO.	PART NO.	DESCRIPTION
1	160-245	MAGNETIC CATCH
2	102-010-022	CIRCUIT BREAKER BOX
	160-800	8-32 × 1¼" FLAT HD. PHIL. MACH. SCREW (2)
3	135-041	DISPOSABLE SUCTION CONTAINER MOUNTING BRACKET
	021-540-168	4 × ⅝ FLAT HD. PHIL. WOOD SCREW ZINC PLATED (2)
4A	850-017	DISPOSABLE SUCTION CONTAINER 5-PACK *CONSISTING OF:*
	070-016	SUCTION HOSE ASSEMBLY, 10 FT. (1)
	135-041	TRAP JAR BRACKET (1)
	160-425	8 × ¾" PAN HEAD SHEET METAL SCREW (2)
	390-144	BLUE SUCTION CANISTER (5)
	SAM-5002	DISPOSABLE HYDROPHOBIC FILTER (2)
4B	850-018	DISPOSABLE SUCTION CONTAINER 10-PACK *CONSISTING OF:*
	135-041	TRAP JAR BRACKET (1)
	160-425	8 × ¾" PAN HEAD SHEET METAL SCREW (2)
	390-144	BLUE SUCTION CANISTER (10)
	070-016	SUCTION HOSE ASSEMBLY, 10 FT. (1)
	112-003-007	CLEAR POLY BAG (1)
	112-002-089	OYSTER WHITE CANISTER BOX (1)
	SAM-5002	DISPOSABLE HYDROPHOBIC FILTER (3)
5	160-914	CASTERS (4)
6	029-005-039	WHITE VACUUM HOSE ASSEMBLY
7	029-005-040	YELLOW AIR HOSE ASSEMBLY
8	102-005-144	AIR REGULATOR AND GAUGE ASSEMBLY
9	102-006-073	SOLENOID ASSEMBLY
	090-558	SOLENOID (PART OF SOLENOID ASSEMBLY) (2)
	160-413	6 × ⅝ RD. HD. PHIL. WOOD SCREW BLK. (2)
		#6 FLAT WASHER, ZINC (2)
10	101-023-001	FOOTSWITCH ASSEMBLY
11	070-016	SUCTION HOSE ASSEMBLY, 10 FT.
12	740-288	PRESSURE HOSE ASSEMBLY



REF. NO.	PART NO.	DESCRIPTION
1	102-001-037	CONTROL PANEL, 110 V
	102-001-035	CONTROL PANEL, 220 V
	160-405	6 × ¾ RD. HD. WOOD SCREW (2)
	160-413	6 × ⅝ RD. HD. PHIL. WOOD SCREW BLK. (1)
		INCLUDING THE FOLLOWING PARTS:
	019-006-007	CIRCUIT BREAKER, 110 V
	090-736	CIRCUIT BREAKER, 220 V
	090-560	LED WITH PIGTAILS
	090-319	RHEOSTAT
	018-001-014	RHEOSTAT KNOB
	090-346	3-WAY TOGGLE SWITCH
2	102-001-038	CORDED INSTRUMENT CONSOLE, 110 V
	102-010-011	CORDED INSTRUMENT CONSOLE, 220 V
	160-413	6 × ⅝ RD. HD. PHIL. WOOD SCREW BLK. (6)
		INCLUDING THE FOLLOWING PARTS:
	740-796	OTOSCOPE HANGER/SWITCH ASSEMBLY
	007-009-010	CONVENIENCE OUTLET, HOSPITAL GRADE, 110 V
	007-009-012	CONVENIENCE OUTLET, HOSPITAL GRADE, 220 V
3	740-349	TRANSILLUMINATOR HANDLE WITH CORD
4	740-495	OTOSCOPE HANDLE WITH CORD SUR 740-799
5	7640-229	OPEN-AIR CUT-OFF HANDLE
6	740-288	7-FT. SILK HOSE AND FITTINGS (4-DRAWER)
	102-027-011	8-FT. SILK HOSE AND FITTINGS (7-DRAWER)
	070-016	SUCTION HOSE ASSEMBLY, 10 FT. (NOT SHOWN)

FIGURE 13. CORDED INSTRUMENT PARTS BREAKDOWN



REF. NO.	PART NO.	DESCRIPTION
1	102-001-036	CONTROL PANEL, 110 V
	102-001-039	CONTROL PANEL, 220 V
	160-405	6 × ¾ RD. HD. WOOD SCREW (2)
	160-413	6 × ⅝ RD. HD. PHIL. WOOD SCREW BLK. (1)
		INCLUDING THE FOLLOWING PARTS:
	019-006-007	CIRCUIT BREAKER, 110 V
	090-736	CIRCUIT BREAKER, 220 V
	090-560	LED WITH PIGTAILS
	007-009-010	CONVENIENCE OUTLET, HOSPITAL GRADE, 110 V
	007-009-012	CONVENIENCE OUTLET, HOSPITAL GRADE, 220 V
	090-346	3-WAY TOGGLE SWITCH
2	740-794	RECHARGEABLE INSTRUMENT CONSOLE
	160-413	6 × ⅝ RD. HD. PHIL. WOOD SCREW BLK. (4)
		INCLUDING THE FOLLOWING PARTS:
	680-350	INSTRUMENT WELL ASSEMBLY
	090-560	LED WITH PIGTAILS
	102-002-058	PRINTED CIRCUIT BOARD ASSEMBLY
3	800-078	RECHARGEABLE HANDLE
4	740-229	OPEN-AIR CUT-OFF HANDLE
5	740-228	7-FT. SILK HOSE AND FITTINGS (4-DRAWER)
	102-027-011	8-FT. SILK HOSE AND FITTINGS (7-DRAWER)
	070-016	SUCTION HOSE ASSEMBLY, 10 FT. (NOT SHOWN)

FIGURE 14. RECHARGEABLE INSTRUMENT PARTS BREAKDOWN

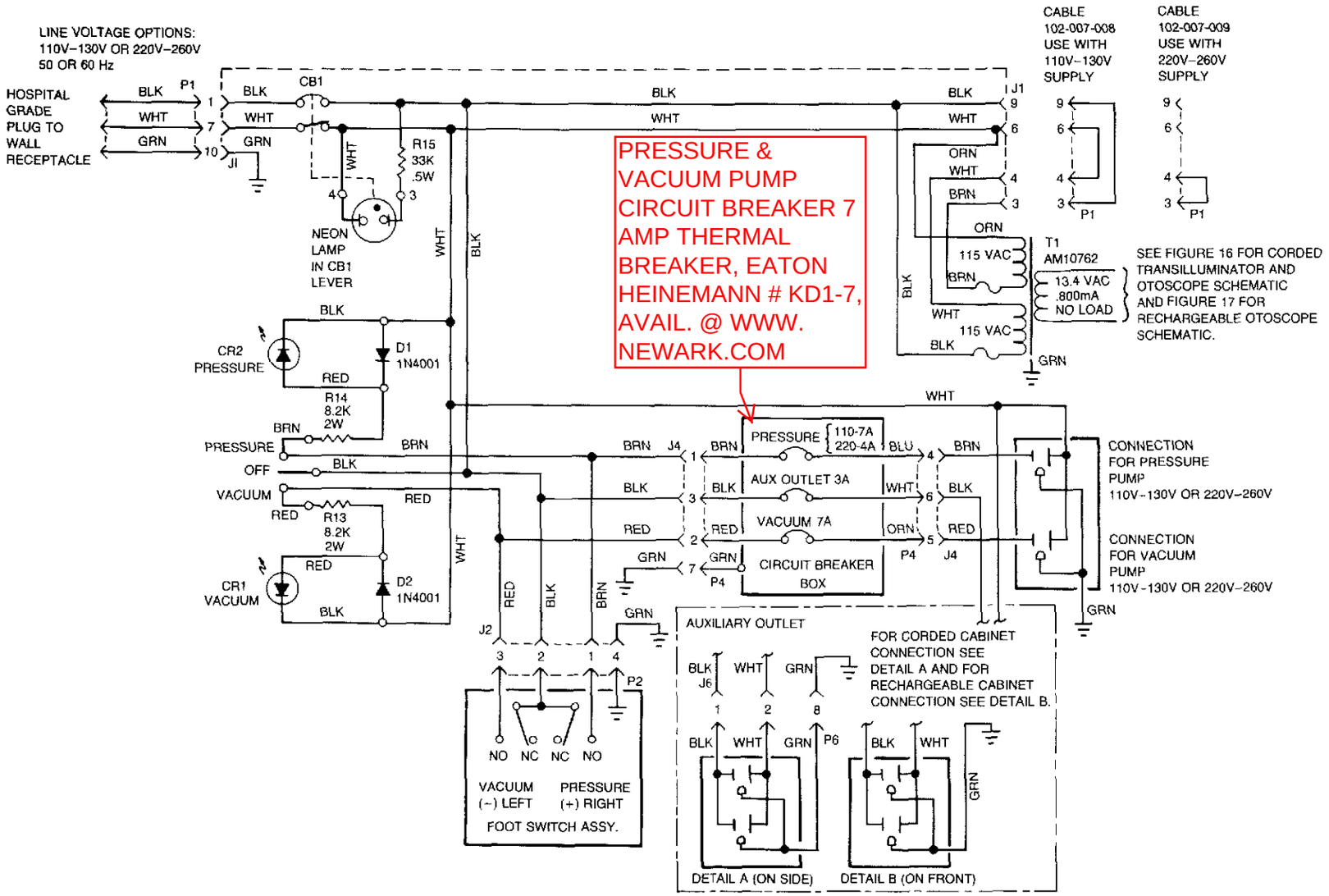


FIGURE 15. MAIN POWER DISTRIBUTION CIRCUIT SCHEMATIC

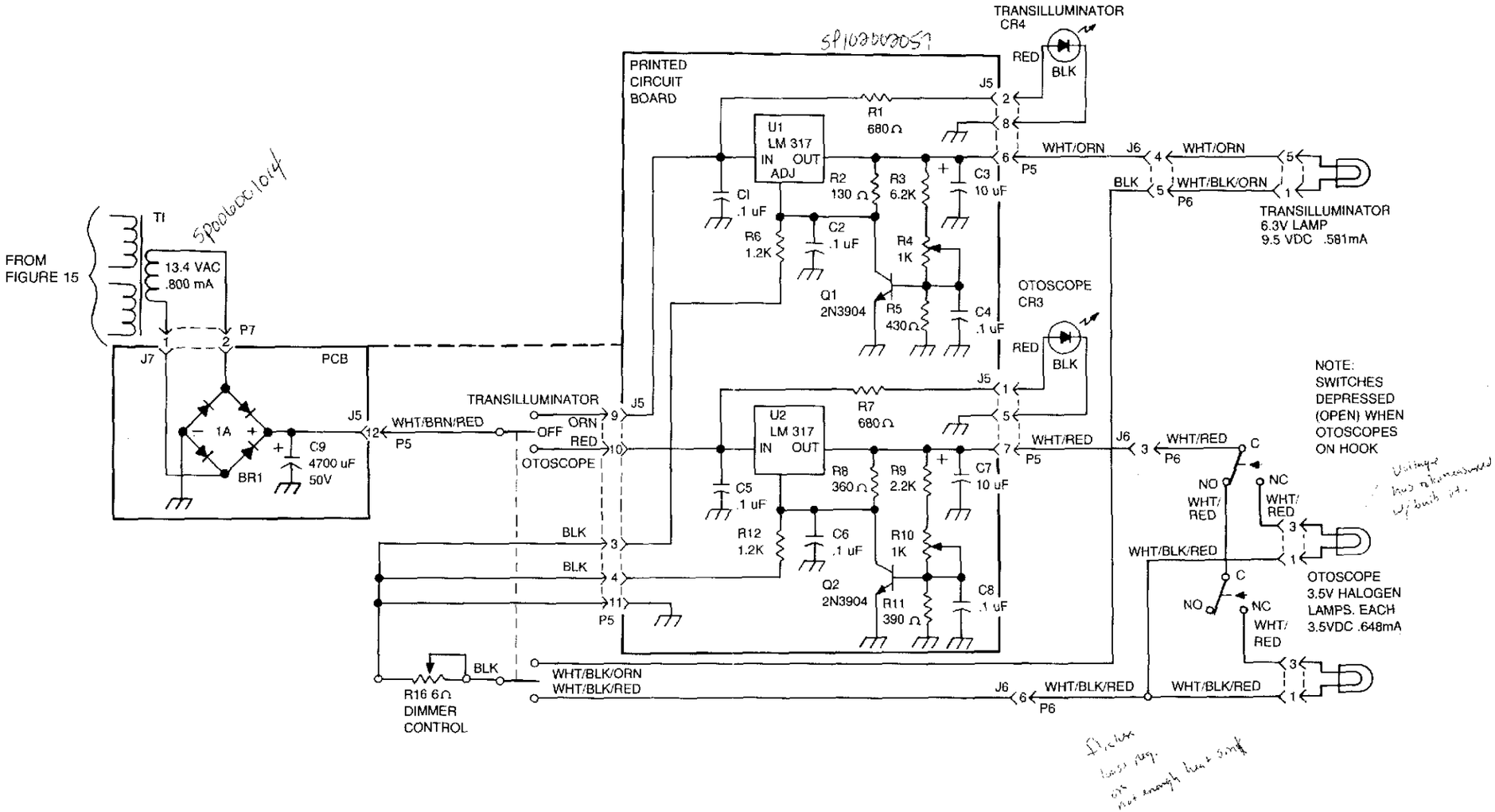


FIGURE 16. CORDED OTOSCOPE AND TRANSILLUMINATOR SCHEMATIC

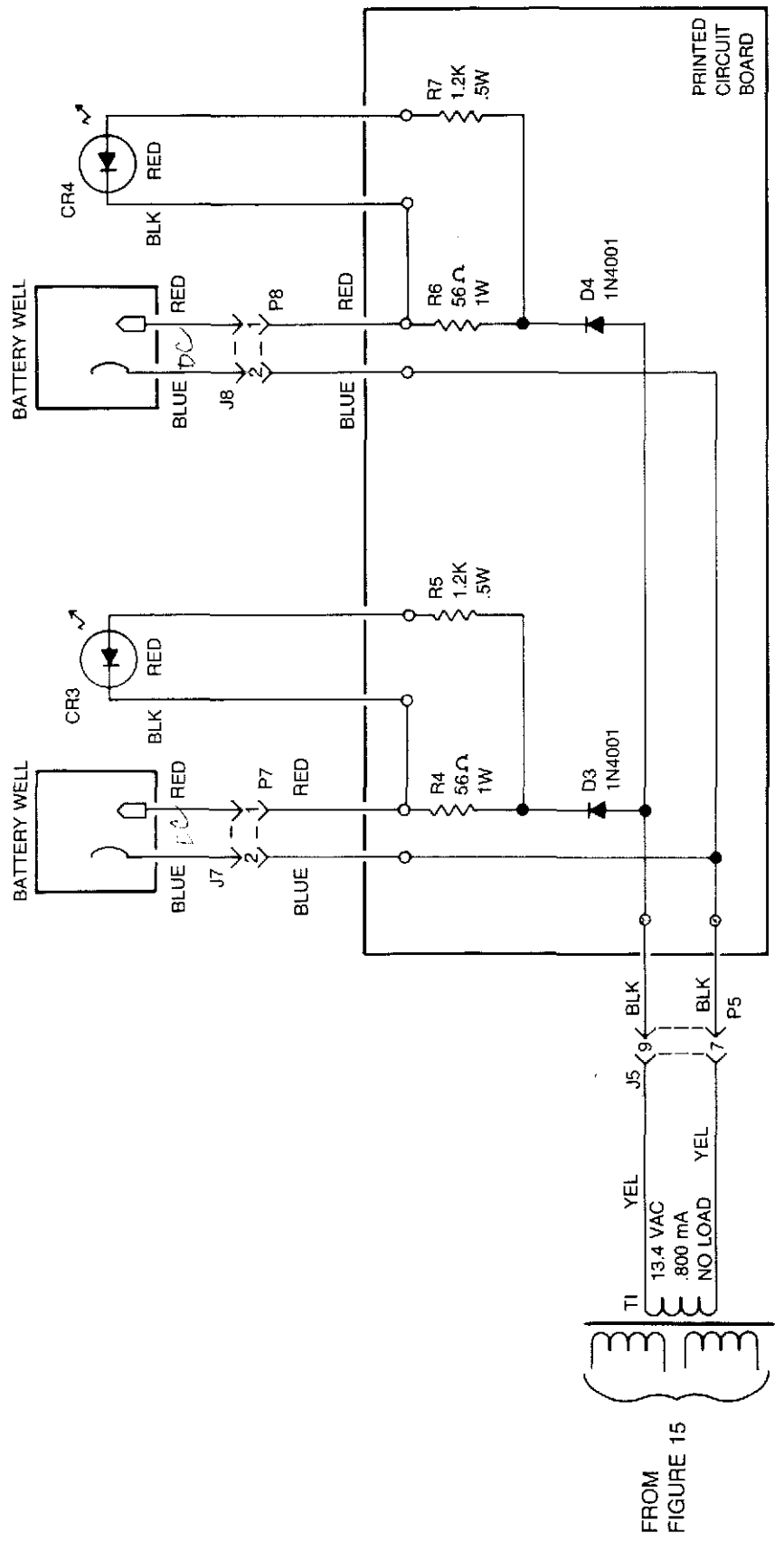
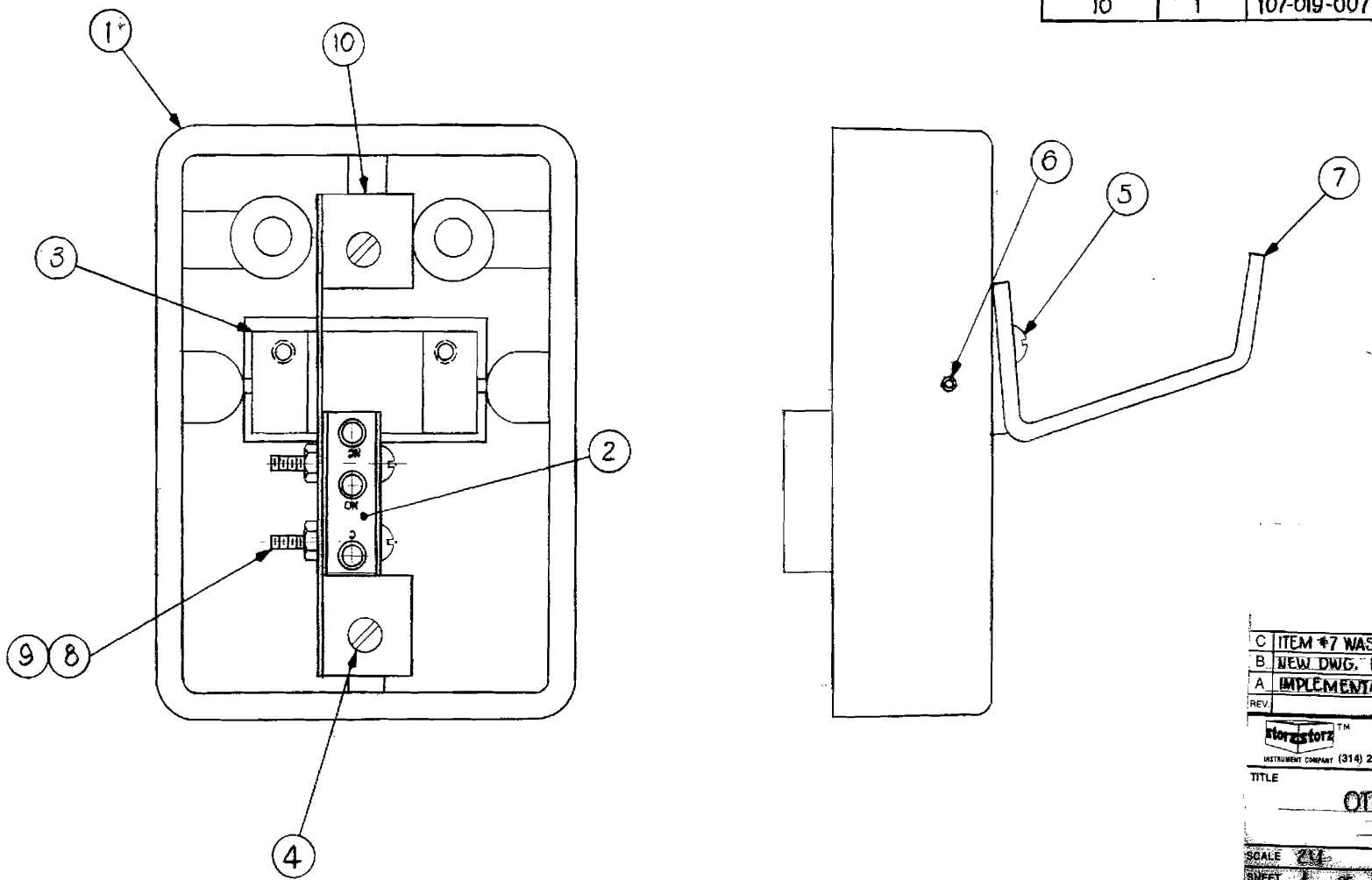


FIGURE 17. RECHARGEABLE INSTRUMENT HANDLE SCHEMATIC

POSSIBLE SUBST. 013008009 →

PARTS LIST

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	050-020	INSTANT-ON BOX
2	1	013-008-003	INSTANT-ON SWITCH, MICRO SW
3	1	135-013	INSTANT-ON BRACKET
4	2	160-055	SCREW 4-40 × 5/16
5	2	160-348	RD. HD. SCREW 6-32 × 5/16
6	2	160-559	ROLL PIN 1/16 × 9/16 S.S.
C 7	1	113-005020	OTOSCOPE HOOK, CHROME PL
8	2	160-392	SCREW 2-56 × 1/2 RD. HD.
9	2	018-010-102	HEX NUT 2-56
10	1	107-019-007	INSTANT-ON SWITCH BRACKET



REV.	CHNG. ORDER NO.	DATE	BY
C	ITEM #7 WAS 390-047 ECO#4000572	4-27-83	MB
B	NEW DWG. E.C.O.#4000474	11-15-82	MB
A	IMPLEMENTATION REVISION		

storz TM INSTRUMENT COMPANY
3365 TREE COURT INDUSTRIAL BLVD.
ST. LOUIS, MO. 63122
(314) 225-5051 (314) 225-3100

SMA

TITLE

OTOSCOPE ASSEMBLY
TREATMENT CABINETS

SCALE 2/1 DWG. NO. 740796 REV C

SHEET 1 OF 1